

REMARKS

In the Official Action claims 15-21 were rejected. Claim 19 is amended herewith. A Rule 132 Affidavit is submitted herewith in traversal of rejections based on cited references. Claims 15-21 remain in the application for further consideration.

Claim 19 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claim 19 has been amended to remove the term “near-optimal”, to more clearly define the invention.

Claims 15-21 were rejected under 35 U.S.C. § 102(a) as being anticipated by “Automatic Application-Specific Instruction-Set Extensions under Microarchitectural Constraints” by Verma, Atasu, Vuletic, Pozzi and Ienne (Verma). The Examiner issues this new grounds for rejection based on a paper presented by a group including some of the inventors of the present application.

Claims 18 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Verma in view of “Automatic Topology-Based Identification of Instruction-Set Extensions for Embedded Processors” by Pozzi, Vuletic, and Ienne (Pozzi). Claims 18 and 19 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over Verma in view of “Automatic Application-Specific Instruction-Set Extension under Microarchitectural Constraints” by Atasu, Pozzi and Ienne (Atasu).

Applicants respectfully submit that Applicants’ invention as described in the specification and claimed in new claims 15-21 provides a different process and system for instruction set extension identification than that described in the Verma reference or Pozzi reference, or Atasu reference, alone or in combination.

Nonetheless, as an expedient to overcome the rejections under 35 U.S.C. § 102(a) and § 103, Applicants herewith provide a Declaration under 37 C.F.R § 1.132 (hereinafter “Declaration”) making unequivocal statement by the inventors of the present application, that the co-authors, Verma and Vuletic (co-authors of the Verma reference cited in the § 102 rejection and as the primary reference in the § 103 rejections), did not contribute to the invention, conception, or reduction to practice of subject matter claimed in the instant application (see, Declaration, Paragraph 7), but as regards any portions of invention as claimed in the instant

application that are described in the Verma reference such inventions were made by co-inventors/applicants of the instant application (see, Declaration Paragraph 8). Given such attribution in accordance with MPEP § 716.10, it should be clear that the subject matter disclosed in the Verma reference was derived from the co-inventors/applicants rather than any non-applicant author of the cited primary reference. Thus, the rejections under 35 U.S.C. § 102 are overcome. Reconsideration is respectfully requested.

As regards rejections under 35 U.S.C. § 103 based on Verma in view of Pozzi or Atasu (claims 18-19), without the primary reference of Verma such rejections should not stand. In any event, Pozzi, among other things, does not teach or suggest evaluating a plurality of subgraphs according to the number of available register file read ports and write ports, and convexity of the subgraphs. Pozzi considers only Multiple Inputs Single Output graphs (MISOs) of a maximum kind. Similarly, Atasu, among other things, does not teach or suggest evaluating a plurality of subgraphs according to the number of available register file read ports and write ports, and convexity of the subgraphs.

By the foregoing amendments, remarks and submissions Applicants respectfully assert that the present application is in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested.

CONCLUSION

If any points remain an issue, which the Examiner feels may be best resolved through a telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below. The Examiner is invited and encouraged to telephone the undersigned with any concerns in furtherance of the prosecution of the present application.

Please charge any deficiency as well as any other fee(s) which may become due at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 50-2896.

Respectfully submitted,

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Dated:

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